NEVADA GOLDFIELDS INC.

BARITE HILL PROJECT

Highway 221 & State Road 33-162
P.O. Box 1510
McCormick, South Carolina 29835
Phone 803/465-3321 Fax 803/465-4308

June 20, 1995

Ms. Gina Loman
Industrial Wastewater Division
SCDHEC
2600 Bull Street
Columbia, SC 29201

Dear Ms. Loman,

Enclosed please find a copy of our latest stream assessment of the unnamed tributary into which Outfalls 001 and 003 discharge. We will continue checking the stream to monitor the recovery over the next few months.

If you have any questions or comments, please feel free to contact Scott Wilkinson at (803) 443-2222.

Sincerely,

Jean V. Whisnant

Jean V. Whisnant
Lab Superintendent

cc: Craig Kennedy
Bureau of Solid and Hazardous Waste

SHEALY ENVIRONMENTAL SERVICES, INC.
SCIENTISTS & CONSULTANTS

106 VANTAGE POINT DRIVE
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CAYCE, SOUTH CAROLINA 29033

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14 June 1995

Ms. Jean Whisnant
Nevada Goldfields, Inc.
P.O. Box 1510
McCormick, SC 29835

RE: Bioassessment of stream A, May 1995

Dear Ms. Whisnant:

A Rapid Bioassessment Protocol I was performed on Stream A on May 26, 1995. Three stations were included in this study, two of which have been routinely sampled as part of the monitoring program established for the NPDES permit in 1992. A third station, approximately 1 kilometer downstream from the discharge and 50 meters upstream of the Stream A and Hawe Creek confluence which was established in March 1995, was also sampled. The purpose of this present study was to continue the monitoring of the condition of the macroinvertebrate community downstream of the weir 001 outfall which was found to be severely impacted during the last biannual assessment in March 1995.

The results of this study indicate that conditions continue to remain good at the upstream control (station 1A) with the presence of a well balanced macroinvertebrate community and a typical coastal plain, first order stream fish fauna. A total of 20 macroinvertebrate taxa were observed at this site, including 7 EPT taxa.

The second site included in this study (station 2A) located approximately 50 meters downstream of the weir 001 outfall which was severely impacted in March, yielding only seven specimens of five taxa. Conditions continued to showed some improvement during this study, with a total of 13 taxa observed including one EPT taxon. The community, though still lacking many taxa normally present and structurally unbalanced, did contain fewer individual specimens of each taxon during this assessment and, the increased number of taxa indicates that the community may be becoming more balanced. No fish were observed at this location during this study.

The third station (station 3A) included in this study was located approximately 50 meters upstream of the Hawe Creek confluence was also found to be impacted in the March

study also showed continued improvement. A total of 18 taxa, including one ETP, were observed during this assessment. The community continues to be dominated by blackfly larvae and a few chironomid midge and beetle larvae.

The enclosed table lists the macroinvertebrates recorded for each of the three stations. The EPT index appears to be the best indicator of the present water quality conditions within the stream. Last month no EPT taxa were recorded at the two downstream sites and this month one taxon (*Cheumatopsyche* sp.) was present, indicating some improvement, which should continue with the decreased discharge. The over all numbers of taxa and specimens collected are good indicators of the improvement at the downstream stations, however, direct between station comparisons should be made with caution because the RBP I method is based on field observation with a minimum of sampling.

If you have any questions or if I can be of further assistance, please call.

Sincerely,.

Michael W. Heyn
Entomologist

Table 1. Macroinvertebrates collected from Stream A, near Nevada Goldfields, Inc. 26 May 1995

TAXON	Station 1A		Station 2A		Station 3A	
	# Taxa	# Specimens	# Taxa	# Specimens	# Taxa	# Specimens
Nemertea	1	1				
Oligochaeta	1	3				
Ephemeroptera	3	13				
Odonata	2	6	4	6	1	6
Heteroptera	3	9	4	6	4	8
Megaloptera					2	8
Trichoptera	4	10	1	3	1	2
Coleoptera	1	4	1	6	2	3
Diptera-Chironomidae	3	14	2	3	4	5
Diptera-Culicidae	1	1	1	1	3	14
Diptera-Simuliidae	1	3	1	4	1	24
Total	20	64	13	37	18	70
EPT Index	7		1		1	